

**AMENDMENTS TO THE DRAWINGS**

The attached sheet(s) of drawings includes changes to Fig. 1. As required on page 4 of the Office Action, Fig 1 is being designated as --Prior Art--.

Attachment:        Replacement sheet

### **REMARKS**

In view of the above amendment, applicant believes the pending application is in condition for allowance.

The Office Action and prior art relied upon have been carefully considered. In an effort to expedite the prosecution independent claim 7 and dependent claim 6 have been clarified as required by the Examiner. Claim 5 has been rewritten as claims 8 to include structural limitations as suggested by the Examiner.

Claims 5-7 were rejected under 35 USC 112, second paragraph as being indefinite. The amendments to the claims have incorporated the points raised by the Examiner and further rejection on this ground is not anticipated.

As required on page 4 of the Office Action Fig 1 is being designated as --Prior Art--.

Claims 5 and 6 were rejected under 35 USC 103(a) as unpatentable over the admitted prior art. The dependent claims 6 and 8 both depend from claim 7 and present a novel combination of an apparatus for reduced sludge production (RSP) that produces lysed bacterial cells; and a reactor substrate having, as its source for bacteria, organic material that is derived from the lysed bacterial cells. The claimed structures are unique to the present method and are not obvious over the admitted prior art.

Claim 5-7 were rejected under 35 USC 102(b) as being anticipated by Rozich (US 5,141,646). Applicant respectfully disagrees with the Examiner's position. The reference is not directed to residual water treatment by fixed biological cultures. The description of the state of the art as shown in Fig 1 of Rozich mentions only an aeration zone 6 including activated sludge (col 3, lines 48-57).

Further, the concept of the ATAD described in col 4, lines 49-68 does not correspond to fixed biological cultures.

Most importantly, the biomass extracted from the ATAD reactor 58 is provided for treatment in reservoir 62 with a strong acid or base. See col 7, lines 63-68). Thus, the reference deals with a chemical treatment that is quite different from the claimed invention which employs a biological treatment reactor 8 associated with apparatus RSP 3.

Further, according to Rozich, the hydrolyzed biomass is sent to mixer 54 where the water to be treated is supplied through line 52. Thus the hydrolyzed biomass is recycled by pipe 56 at the intake of the reactor 58.

In marked distinction the present invention avoids return of the effluent to the intake of the water treatment line.

In view of the above, consideration and allowance are, therefore, respectfully solicited.

In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below.

The Director is hereby authorized to charge any fees, or credit any overpayment, associated with this communication, including any extension fees, to CBLH Deposit Account No. 22-0185, under Order No. 21029-00287-US1 from which the undersigned is authorized to draw.

Dated: June 28, 2007

Respectfully submitted,

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